

EFFECTIVE TAX RATE V. MARGINAL TAX RATE

Assume the following hypothetical rate schedule:

<u>Rate Bracket</u>	<u>Tax Rate</u>
\$0 -- \$10,000	10%
\$10,001 -- \$50,000	20%
\$50,001 and above	40%

Problem 1

Mr. Smith has gross income of \$8,000, no above-the-line deductions, no itemized deductions, and no tax credits. The standard deduction for this hypothetical year is \$4,000 and the personal exemption is \$2,000. Calculate Mr. Smith's tax, and compare his effective tax rate with his marginal tax rate.

Problem 2

The facts are the same as in Example 1, except that Mr. Smith has gross income of \$36,000. Calculate Mr. Smith's tax, and compare his effective tax rate with his marginal tax rate.

Problem 3

Mr. Smith has gross income of \$100,000 and itemized deductions equal to \$8,000. Once again, Mr. Smith has no above-the-line deductions or tax credits, and the personal exemption is \$2,000. Calculate Mr. Smith's tax, and compare his effective tax rate with his marginal tax rate.

Problem 4

In a variation on example 3, first calculate Mr. Smith's tax with no above-the-line, itemized, or standard deductions and no credits (but with the personal exemption). This will be referred to as the "baseline" scenario.

Next, calculate Mr. Smith's tax based on the same assumptions about deductions as in the baseline scenario, but with an \$8,000 tax credit.

Finally, using the baseline scenario as your reference point, compare the amount of tax that Mr. Smith saved under the deduction scenario in example 3 with the amount of tax that he saved under the credit scenario in this example 4. Why is there a difference?